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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,152	10/15/2001	Takeshi Takezawa	110858	9283

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EXAMINER

NGO, HUYEN LE

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 12/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/976,152

Applicant(s)

TAKEZAWA ET AL.

Examiner

Julie-Huyen L. Ngo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2,3 and 12-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,3 and 12-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 2-3 and 12-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Ogawa (US6195143B1).

With respect to claims 2, 3 and 12-16, Ogawa teaches (Figs. 1 and 3) forming a projector comprising:

Claim 2,

- a light source 30;
- a liquid crystal device 80, which modulates light emitted from the light source; projection lens 90, which projects the light modulated by the liquid crystal device;

wherein the liquid crystal device (Fig. 3) having:

- a base substrate 821 that has a plurality of pixel electrodes 823 disposed in a matrix arrangement and drive elements 822 each provided for corresponding one of the pixel electrodes 823 and electrically connected thereto,

- a counter substrate 825 provided with a light-shielding mask 826P which covers at least a portion of the drive elements,
- liquid crystal 827 provided between the base substrate and the counter substrate;
- a condenser lens 60 being provided at a light-incident side of the liquid crystal device, wherein, the field lens 70 shifting a center axis of light incident upon the condenser lens and an optical axis of the condenser lens in parallel so that the incident angle of light that strikes the drive elements becomes small when the center axis of the light incident upon the condenser lens and the optical axis of the condenser lens coincide, the angle of the light incident upon the liquid crystal device is restricted (see figures 1&3, and col. 7, line 63 to col. 8, line 22)

wherein

- the angle of light incident upon the liquid crystal device is restricted not to allow the light to strike the drive elements (as shown in figure 3)

Claim 3,

- an optical axis of the projection lens being shifted parallel to the center axis of the light incident upon the condenser lens in the same direction as the optical axis of the condenser lens (figure 1)

Claim 12,

- a center axis of the light incident upon the liquid crystal device coincides with a distinct-vision direction of the liquid crystal device

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Claims 13 and 15,

- a viewing angle compensating film (polarizer 840) which causes a center axis of the light incident upon the liquid crystal device and a distinct-vision direction of the liquid crystal device to coincide is further provided at the light-incident side of the liquid crystal device

Claims 14 and 15,

- a viewing angle compensating film (polarizer 870) which causes a center axis of light emitted from the liquid crystal device and a distinct-vision direction of the liquid crystal device to coincide is further provided at a light-exiting side of the liquid crystal device

Claim 16,

- a scanning line and a data line crossing and situated above the scanning line on the base substrate are provided at the base substrate, and the drive elements are connected to the data lines and the scanning line

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa (US6195143B1) as applied to claim 2 above and further obvious as follow:

Ogawa teach (col. 5, lines 32-42) that the projector can comprise a color separator that separates the illumination light into a plurality of colors; a plurality of liquid crystal devices to received each of the plurality of colors into which the light is separated by the color separator. Doing so would enable color images to be displayed with improved contrast (e.g. figures 7).

Therefore, it would have been obvious for the projector as disclosed above in claim 2 to include:

Claim 17,

- a color light separation optical system, which separates the light emitted from the light source 30 into light beams of a plurality of colors being disposed between the light source and the liquid crystal device

Claim 18,

- a plurality of liquid crystal devices, which modulates light emitted from the light source, in correspondence with the light beams of a plurality of colors

Doing so would enable color images to be displayed with improved contrast in the projector.

### ***Response to Arguments***

Applicant's arguments with respect to claim 2 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Julie-Huyen L. Ngo whose telephone number is (703) 305-3508. The Examiner can normally be reached on T-Friday.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. Robert H. Kim can be reached at (703) 305-3492.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

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Any facsimile-transmitted correspondence to this application should be faxed to the centralized facsimile number (703) 872-9306.

November 23, 2003



*Julia-Huyen L. Ngo*  
**Patent Examiner**  
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